

Chapter 7 System of Equations**Section 7.3: Using Graphing Technology to solve A system of linear Equations**

Focus: Determine and verify the solution of a linear system using graphing technology.

Make Connections

In 2006, the population of Canada was 31 612 897. The population of the eastern provinces was 12 369 487 more than the population of the territories and western provinces.

- What linear system models this situation?
- Why can't you determine an exact solution by graphing on grid paper?

Example 1: Using graphing technology to solve a linear system with equations in slope-intercept form
Solve the following linear system:

$$y = -\frac{1}{2}x + 5 \quad \& \quad y = 3x - 4$$

Sketch the window of the graphing calculator

Is your solution exact or approximate?